calibrate such conveyances. Volumetric measurements in tanks shall be made only in accurately calibrated tanks equipped with suitable measuring devices, whereby the actual contents can be correctly ascertained. If the temperature of spirits (including denatured spirits) is other than the standard of 60 degrees Fahrenheit, gallonage determined by volumetric measurements shall be corrected to the standard temperature by means of table 7. In the case of denatured spirits, the temperature-correction factor for the proof of the spirits used in denaturation will give sufficiently accurate results, except that the temperature-correction factor used for specially denatured spirits, Formula No. 18, should be that given in table 7 for 100 proof spirits. When the quantity of spirits, in wine gallons, has been determined by volumetric measurement, the number of proof gallons shall be obtained by multiplying the wine gallons by the proof of the spirits as determined under § 30.31.

Example Gauge glass reading inches—88.
Wine gallons per inch—48.96.
Temperature °F—72.
Proof of spirits—86.8.
Temperature correction factor (Table 7)—0.995.
48.96 W.G.×88=4308.48 wine gallons.
4308.48 W.G.×0.995=4286.94 wine gallons.
4286.94 W.G.×0.868=3721.06392=3721.1 proof gallons.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1358, as amended (26 U.S.C. 5204))

[T.D. ATF–198, 50 FR 8535, Mar. 1, 1985, as amended by T.D. ATF–381, 61 FR 37004, July 16, 1996]

§ 30.52 Procedure for measurement of cased spirits.

Where the quantity of spirits in a case is to be determined by volume, such determination shall be made by ascertaining the contents of one bottle in the case and multiplying that figure by the number of bottles in the case. For cases containing bottles filled according to the metric system of measure, the quantity determined shall be converted to wine gallons, as provided in § 19.722 of this chapter. The wine gallons of spirits thus determined for one case may then be multiplied by the number of cases containing spirits at the same proof when determining the quantity of spirits for more than one case. The proof gallons of spirits in cases shall be determined by multiplying the wine gallons by the proof (divided by 100).

(Sec. 201, Pub. L. 85–859, 72 Stat. 1358, as amended (26 U.S.C. 5204))

Subpart E—Prescribed Tables

NOTE. The tables referred to in this subpart appear in their entirety in the ''Gauging Manual Embracing Instructions and Tables for Determining Quantity of Distilled Spirits by Proof and Weight'' which is incorporated by reference in this part (see § 30.1).

§ 30.61 Table 1, showing the true percent of proof spirit for any indication of the hydrometer at temperatures between zero and 100 degrees Fahrenheit.

This table shows the true percent of proof of distilled spirits for indications of the hydrometer likely to occur in practice at temperatures between zero and 100 degrees Fahrenheit and shall be used in determining the proof of spirits. The left-hand column contains the reading of the hydrometer and on the same horizontal line, in the body of the table, in the ''Temperature'' column corresponding to the reading of the thermometer is the corrected reading or ''true percent of proof.'' The table is computed for tenths of a percent.

Example.

Temperature, °F	75
Hydrometer reading	193
True percent of proof	189.5

Where fractional readings are ascertained, the proper interpolations will be made (see § 30.23). If the distilled spirits contain dissolved solids, temperature-correction of the hydrometer reading by the use of this table would result in apparent proof rather than true proof.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1358, as amended (26 U.S.C. 5204))

§ 30.62 Table 2, showing wine gallons and proof gallons by weight.

The wine and proof gallon content by weight and proof of packages of distilled spirits usually found in actual practice will be ascertained from this table. The left-hand column contains the weights. The true percent of proof is shown on the heading of each page in a range from 90 degrees to 200 degrees.

Under the true percent of proof and on the same horizontal line with the weight will be found the wine gallons (at 60 degrees Fahrenheit) and the proof gallons respectively. Where either the weight or the proof of a quantity of spirits is beyond the limitations of this table, the number of proof gallons may be ascertained by reference to Table 3. This table may also be used to ascertain the wine gallons (at 60 degrees Fahrenheit) and proof gallons of spirituous liquor containing dissolved solids where the weight, apparent proof (hydrometer indication corrected to 60 degrees Fahrenheit), and obscuration factor have been determined.

Example. 334 lbs. of distilled spirits.
Apparent proof—96.0°.
Obscuration—0.8°.
True Proof 96.0°+0.8°=96.8°.
334 lbs. at 96.0° apparent proof=42.8 wine gallons.
42.8 wine gallons×96.8°=41.4 proof gallons.

In addition this table may be used to obtain the wine gallons, at the prevailing temperature, of most liquids within the range of the table, from the weight of the liquid and the uncorrected reading of the hydrometer stem. An application of this would be in determining the capacity of a package.

Example. It is desired to determine, or to check the rated capacity of a package having a net weight of 395 pounds when completely filled with spirits having an uncorrected hydrometer reading of 113.0°. The full capacity of the package, 51.5 wine gallons, would be found by referring to the table at 395 pounds and 113° proof (hydrometer reading).

(Sec. 201, Pub. L. 85–859, 72 Stat. 1358, as amended, 1362, as amended (26 U.S.C. 5204, 5211))

§ 30.63 Table 3, for determining the number of proof gallons from the weight and proof of spirituous liquor.

When the weight or proof of a quantity of distilled spirits is not found in Table 2, the proof gallons may be ascertained from Table 3. The wine gallons (at 60 degrees Fahrenheit) may be ascertained by dividing the proof gallons by the proof.

Example. A tank car of spirits of 190 degrees of proof weighed 60,378 pounds net. We find—

	Proof gallons
60,000 pounds equal to	16,778.4
300 pounds equal to	83.9
70 pounds equal to	19.6
8 pounds equal to	2.2
Total	16,884.1

That is, the total weight of 60,378 pounds of spirits at 190 proof is equal to 16,884.1 proof gallons. The equivalent gallonage for 70 pounds is found from the column 700 pounds by moving the decimal point one place to the left; that for 8 pounds from the column 800 pounds by moving the decimal point two places to the left.

Example. A package of spirits at 86 proof weighed 321½ pounds net. We find—

	Proof gallons
300 pounds equal to	32.7
20 pounds equal to	2.2
1 pound equal to	.1
½ pound equal to	.1
Total	35.1

That is, 321½ pounds of spirits at 86 proof is equal to 35.1 proof gallons. The equivalent gallonage for 20 pounds is found from the column 200 pounds by moving the decimal point one place to the left; that for 1 pound from the column 100 pounds by moving the decimal point two places to the left; that for the ½ pound from the column 500 pounds by moving the decimal point three places to the left.

Fractional gallons beyond the first decimal ascertained through use of this table will be dropped if less than 0.05 or will be added as 0.1 if 0.05 or more. The wine gallons (at 60 degrees Fahrenheit) may be determined by dividing the proof gallons by the proof. For example: 35.1 divided by 0.86 equals 40.8 wine gallons.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1358, as amended (26 U.S.C.5204))

§ 30.64 Table 4, showing the fractional part of a gallon per pound at each percent and each tenth percent of proof of spirituous liquor.

This table provides a method for use in ascertaining the wine gallon (at 60 degrees Fahrenheit) and/or proof gallon contents of containers of spirits by multiplying the net weight of the spirits by the fractional part of a gallon per pound shown in the table for spirits of the same proof. Fractional gallons beyond the first decimal will be